IN THE CLAIMS

1. (currently amended) An RF shield for MRI systems, said RF shield comprising a connector configured to connect a first capacitor to said RF shield, wherein said RF shield is grounded via the first capacitor and is configured to prevent coupling between a gradient coil and an RF coil, wherein said RF shield is separate from the first capacitor, and wherein one of the MRI systems configured to generate a vertical magnetic field.

2. (currently amended) An RF shield according to Claim 1, wherein the first capacitor has a first capacitance, wherein said RF shield is coupled to a ~~capacitance of a~~ second capacitor having a second capacitance, wherein the second capacitor is connected to a ground closest to the earth ground, and wherein the second capacitance is set to the smallest value of the first and second capacitances.

3. (currently amended) An RF shield according to Claim 1, wherein the first capacitor has a capacitance of ~~a capacitor is~~ 1000 pF or more.

4. (currently amended) An MRI system comprising:

a first capacitor;

a radio-frequency (RF) coil;

a gradient coil; and

an RF shield configured to prevent coupling between said RF coil and said gradient coil, wherein said MRI system configured to generate a vertical magnetic field, and said RF shield configured to be grounded via said first capacitor, and wherein said RF shield is separate from said first capacitor.

5. (currently amended) An MRI system according to Claim 4, further comprising a second capacitor, wherein ~~a capacitance of a~~said first capacitor has a first capacitance and said second capacitor has a second capacitance, wherein said RF shield is coupled to said second capacitor that is connected to a ground closest to the

earth ground, wherein the second capacitance is set to the smallest value of the first and second capacitances.

6. (currently amended) A vertical field-type MRI system~~, wherein~~ comprising:

a first set of capacitors;

a second set of capacitors;

an upper RF shield is grounded via said capacitors within said first set at four or more points whose directions are different from one another by an equal ~~angle, and~~angle, wherein said capacitors within said first set are separate from said upper RF shield; and

a lower RF shield is grounded via said capacitors within said second set at four or more points whose directions are different from one another by an equal angle, wherein said capacitors within said second set are separate from said lower RF shield.

7. (currently amended) An MRI system according to Claim 5, ~~wherein a~~wherein the first capacitance ~~of a capacitor~~ is 1000 pF or more.

8. (currently amended) An MRI system according to Claim 6, wherein one of said capacitors within said first set has a capacitance of ~~a capacitor is~~ 1000 pF or more.

9. (currently amended) An RF shield ~~according to Claim 1,~~for MRI systems, said RF shield comprising a connector configured to connect a capacitor to said RF shield, wherein said RF shield is grounded via the capacitor, wherein one of the MRI systems configured to generate a vertical magnetic field, and wherein the capacitor is not connected to the RF shield via an RF coil.

10. (previously presented) A magnetic resonance imaging (MRI) system comprising:

a pole piece;

a radio-frequency (RF) coil layered on a side of said pole piece;

a gradient coil configured to generate a gradient field;

an RF shield configured to prevent coupling between said RF coil and said gradient coil;

a capacitor;

a connector configured to connect said capacitor to said RF shield, wherein said MRI system configured to generate a vertical magnetic field, and said RF shield configured to be grounded via said capacitor.

11. (previously presented) An MRI system according to Claim 10, wherein said capacitor is not connected to said RF shield via said RF coil.